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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,253	09/26/2003	Chih-Tien Chang	GEN0006-US	8572

7590 02/21/2007

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EXAMINER	
NGUYEN, KIMNHUNG T	
ART UNIT	PAPER NUMBER
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/670,253	CHANG ET AL.	
	Examiner	Art Unit	
	Kimnhung Nguyen	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE 11/29/06*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 7-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-4* is/are allowed.

6)☒ Claim(s) *7-10,16,20-23 and 29* is/are rejected.

7)☒ Claim(s) *11-15,17-19,24-28 and 30-32* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/29/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This application has been examined. The claims 1-4 and 7-32 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 7, 10, 16,20,23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valmiki et al. (US 6,661,422) in view of Maeda et al. (US 2003/0156086).

As to claims 7, 20 Valmiki et al. discloses in fig. 3, a display control device (total fig. 3) for processing an input image signal and providing an output image signal compatible with a panel module in a display system, comprising a mode controller (56) for producing a mode signal associated with said panel module (58); a scaling engine (52) for converting an input image signal to a first interface signal (64, see 0092), a timing controller (time base corrector TBC 72, fig. 3) for converting said first interface signal into a second interface signal(60, see 0124).

However, Valmiki et al. does not disclose a selector for selecting one of the first interface signal and second interface signal in response to the mode signal.

Maeda et al. discloses in fig. 40, a display control device (111) comprising a selector (123) for selecting the see first and second interface signal in response to the mode signal (see 0082).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a selector for selecting the see first and second interface signal in response to the mode signal as taught by Maeda et al. into the system of Valmiki et al. for producing the claimed invention because this would supply with control signals and video signal, respectively.

As to claims 10, 16, 23 and 29, Valmiki et al. discloses further an interface circuit (62) for either bypassing interface signal to serve as said output image. However, Valmiki et al. does not disclose a selector interface signal.

Maeda et al. discloses in fig. 40, a display control device (111) comprising a selector (123) as discussed above.

4. Claims 8,9,21,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valmiki et al. (US 6,661,422) in view of Maeda et al. (US 2003/0156086) and in view of Wang et al. (US 6,433,579 cited by applicant).

Valmiki et al. discloses in fig. 3, a display control device (total fig. 3) for processing an input image signal and providing an output image signal compatible with a panel module in a display system, comprising a mode controller (56) for producing a mode signal associated with said panel module (58); a scaling engine (52) for converting an input image signal to a first interface signal (64, see 0092), a timing controller (time base corrector TBC 72, fig. 3) for converting said first interface signal into a second interface signal (60, see 0124).

Maeda et al. discloses in fig. 40, a display control device (111) comprising a selector (123) for selecting the see first and second interface signal in response to the mode signal (see 0082) as discussed above. However, Valmiki et al. and Maeda et al. do not disclose that the first interface signal or second interface signal is a transistor-transitor level TTL/TCON interface signal.

Wang et al. discloses in fig. 1, a device (10) has an I/O including an interface signal is TTL interface signal (see col. 4, lines 35-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the device (10) has an I/O including an interface signal is TTL interface signal as taught by Wang et al. into the system of Vaimiki et al. and Maeda et al. for producing the claimed invention because this would read an input word from the I/O cells and transmit the word the microprocessor.

Allowable Subject Matter

5. Claims 1-4 are allowed.

6. Claims 11-15,17-19,24-28 and 30-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the cited art teaches or suggests that the display control device, further comprising an a phase-locked loop for providing a clock signal to said interface circuit; wherein said clock signal has a first frequency when said first interface signal is by passed to serve as said output image signal and has a second frequency when said second interface signal is provided to serve

as said output image signal, wherein said second frequency is greater than said first frequency as claims 11,17,24 and 30.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimnhung Nguyen
February 17, 2007

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
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